EXHIBIT 5

IN THE UNITED STATES DISTRICT COURT

FOR THE EASTERN DISTRICT OF TEXAS

TYLER DIVISION

SOVERAIN SOFTWARE LLC Plaintiff, vs. CDW CORPORATION, NEWEGG INC., REDCATS USA, INC., SYSTEMAX INC., ZAPPOS.COM, INC., TIGER DIRECT, INC., THE SPORTSMAN'S GUIDE, INC., and REDCATS USA LP Defendants.	CIVIL ACTION NO. 6:07 CV 511 Hon. Leonard E. Davis

DECLARATION OF MICHAEL I. SHAMOS

I, Michael I. Shamos, declare as follows:

1. My name is Michael I. Shamos. I am a Distinguished Career Professor in the School of Computer Science at Carnegie Mellon University in Pittsburgh, Pennsylvania. I am a founder and Co-Director of the Institute for ecommerce at Carnegie Mellon and Director of the eBusiness Technology degree program.

2. I currently teach graduate courses at Carnegie Mellon in Electronic Commerce, including eCommerce Technology, Electronic Payment Systems, Electronic Voting and eCommerce Law and Regulation and have done so since 1999. In Fall 2009 I am teaching course entitled Law of Computer Technology.

3. I am an attorney admitted to practice in Pennsylvania and have been admitted to the Bar of the U.S. Patent and Trademark Office since 1981. I have not been asked to offer any

opinions on patent law in this action.

4. I have been retained by Jones Day, trial counsel for Soverain Software LLC ("Soverain"), as a technical expert in this action. I previously submitted a Rebuttal Expert Report in this action relating to validity.

5. I submit this Declaration in response to Newegg Inc.'s Motion for Summary Judgment of Invalidity and/or Denial of Priority Claim of the '639 Patent. I have personal knowledge of the matters set forth in this declaration.

A Person of Ordinary Skill in the Art

6. In 1994, one of ordinary skill in the art to which the '639 Patent pertains would have had at least three years of experience in software development, including experience with client/server computing, hypertext and key Web technologies, namely HTTP, URLs, HTML and their associated specifications.

The Patented Inventions

7. The '639 Patent addresses a problem that was long lamented in Web-based systems but had never been solved. The stateless nature of the HTTP protocol made it very difficult for merchants to develop Web-based sales systems. Each request to a merchant server was independent, so there was no effective way to collate requests and identify them as relating to the same purchase. There was considerable debate around the time the parent of the '639 patent was filed about how to maintain state in a stateless protocol. However, even being able to maintain state does not by itself solve the merchants' problem of relating individual messages to the same transaction.

8. Among the innovations of the '639 Patent is a consistent and logical concept of a session and a mechanism for identifying visits that belong to the same session. The user is assigned a session identifier at the first request for service in a session. The session continues

until a task or a set of tasks is complete. A session could encompass one visit, several visits over a short period of time, or many visits over an extended period. Even a method for adding state to HTTP by itself would not solve the problem.

The "special browser"

9. The '780 Patent describes two embodiments within the '639 Patent claims: an embodiment wherein session IDs are passed in URLs and an embodiment wherein session IDs are passed using capabilities of a modified browser. I am focusing on the latter embodiment.

10. The '780 patent specification discloses the function of a "special browser" to be a browser that can "store an SID or a similar tag for use in each URL call to that particular server." At the time of filing, one of ordinary skill in the art would have understood the referenced "URL call" is an HTTP request from the client running the browser to particular server.

11. When the '780 patent states that "[t]his embodiment, however, requires a special browser which can handle such communications and is generally not suitable for the standard browser format common to the Web," one of ordinary skill in the art would have understood the specification to mean that the commonly used browsers at the time of filing would not support "such communications" that are used to command the browser to store data on the client machine and later send it back to the server. Further, one or ordinary skill would have understand that the HTTP protocol, as it existed at filing, needed to be modified to supported the "communications" handled by the special browser.

12. The "special" nature of the browser did not refer to any technological problem or inventive barrier. It meant instead that a browser was a common piece of utility software, often supplied for free. Websites depended for their operation on the fact that browsers were compatible with a specific version of the hypertext transfer protocol (HTTP) and the hypertext markup language (HTML). Neither HTML nor HTTP at the time supported commands that

would cause a browser to store or retrieve site-specific data on a client machine. This was not because a mechanism to do so was elusive, but merely because the HTML and HTTP standards, which commercial browsers had to support, had not yet been modified to support such storing.

13. Therefore, if any website desired to depend on a browser to allow such storing, a significant number of client machines would have to be outfitted with such a browser. That represented a commercial challenge, not a technical one

14. Based on the description of the "special browser" provided in the '780 patent, one of ordinary skill in the art would have had all of the information necessary to program an existing browser to perform the required storage and return of data, including a session ID. I estimate that the coding would have taken one of ordinary skill who was familiar with browser programming approximately one week to implement a working version including quality control testing.

15. At the time the '780 Patent was filed, a commercially available browser supporting cookies (one way of implementing the described mechanism) had been publicly available since at least the release of version 1.0 of the Netscape Navigator browser in December 1994 or January 1995. Anyone wishing to replicate this functionality in another browser would have been able to do so without experimentation beyond normal quality testing.

Montulli 5,774,670

16. The summary judgment motion contains a claim chart with invalidity contentions regarding the Montulli '670 patent. The Montulli patent was considered by the Patent Office during the prosecution of the '639 patent.

17. The summary judgment motion addresses '639 patent claim 47, which is not asserted and is not addressed in the report of Newegg's expert or its Invalidity Contentions. Nevertheless, I treated claim 47 in my Expert Report and treat it herein.

18. The Montulli patent teaches the use of a state object, not a session identifier, and therefore does not meet any claims of the ’639 patent. I treat the Montulli patent in more detail in the following claim charts on the applicability of Montulli to the ’639 patent claims. Newegg’s contentions appear in the second column. My rebuttal arguments appear in the third column. The contents of the claim chart are taken directly from Exhibit 3 of my Rebuttal Expert Report.

'639 patent claim	**Contentions re Montulli patent**	**Rebuttal**
1. A method of processing service requests from a client to a server system through a network,	Anticipated by Montulli U.S. Patent No. 5,774,670 filed October 6, 1995 or WWW-Talk Montulli 4/19/95. "A method and apparatus for transferring state information between a server computer system and a client computer system." (Montulli '670, Abstract.)	The claim is not anticipated. Transferring state information as disclosed in the reference does not constitute a session identifier.
said method comprising the steps of forwarding a service request from the client to the server system,	"In one embodiment of the method, an http client requests a file, such as an HTML document, on an http server, and the http server transmits the file to the http client." (Montulli '670, Abstract and Fig. 4.)	

wherein communications between the client and server system are according to hypertext transfer protocol;	"In one embodiment of the method, an http client requests a file, such as an HTML document, on an http server, and the http server transmits the file to the http client." (Montulli '670, Abstract and Fig. 4.) Http stands for hypertext transfer protocol.	
returning a session identifier from the server system to the client,	"In addition, the http server transmits a state object, which describes certain state information, to the http client." (Montulli '670, Abstract and Fig. 4.)	A "state object, which describes certain state information" does not disclose a session identifier. Nowhere in the reference is there any disclosure of a session identifier. In fact, the only two cookies for maintaining state are disclosed: "Set-Cookie: CUSTOMER=WILE_E_COYOTE" (10:27) , which is clearly a customer name. This persists across all requests, independent of session or the completion of any tasks, and thus cannot be a session identifier because it does not "identify a session" as required by the Court's construction. Set-Cookie: PART_NUMBER=ROCKET_LAUNCHER" (10:42-43), which is clearly a product identifier. This cookies is used to maintain a list of items being purchased and changes during a session, so

		it also cannot identify a session.
the client storing the session identifier for use in subsequent distinct requests to the server system; and	[THIS LIMITATION IS NOT ADDRESSED AT ALL IN THE CONTENTIONS OR THE SUMMARY JUDGMENT MOTION]	

appending the stored session identifier to each of the subsequent distinct requests from the client to the server system.	Contentions: "In addition, the http server transmits a state object, which describes certain state information, to the http client." (Montulli '670, Abstract and Fig. 4.) Summary judgment motion: "The http client stores the state object, and will typically send the state object back to the http server when making later requests for files on the http server." State information may be set by the server, and can be included for later use in subsequent requests from the client. Id. at col. 7, line 56 – col. 8, line 14.	As explained above, a state object is not a session identifier.
10. A method as claimed in claim 1 wherein the server system assigns the session identifier to an initial service request to the server system.	Anticipated by Montulli U.S. Patent No. 5,774,670 filed October 6, 1995 or WWW-Talk Montulli 4/19/95. "In one embodiment of the method, an http client requests a file, such as an HTML document, on an http server, and the http server transmits the file to the http client." (Montulli '670, Abstract and Fig. 4.) Summary judgment motion adds: "[W]hen a server responds to an http request by returning an HTTP object to a client, the server may also send a piece of state information that the client system will store . . . . [W]hen the client system sends future HTTP requests to servers that fall within the range of defined URLs, the requests will include a transmittal of the current value of the state object." Montulli '670, Col. 7, ll. 13-23.	The parent claim has not been shown to be invalid. A state object is not a session identifier. There is no disclosure of assigning anything to an "initial" service request. Fig. 5 discloses sending a cookie much later in the process. Summary judgment additions: A "piece of state information" is not a session identifier. For example, a part number, as illustrated above, is a "piece of state information," but is not a session identifier.

47. The method of claim 1, wherein the session identifier is designated by the server system, furthers comprising the steps of: validating, at the server system, the appended session identifier; and returning a controlled document if the appended session identifier is valid.	[THIS CLAIM IS NOT ASSERTED AND IS NOT ADDRESSED IN THE TITTEL REPORT OR IN THE CONTENTIONS. IT IS ADDRESSED IN THE SUMMARY JUDGMENT MOTION] Summary judgment motion adds: "State information may be set by the server, and can be included for later use in subsequent requests from the client. Exh. I, at col. 7, line 56 – col. 8, line 14. The "path" attribute is used to specify a subset of file system directories in a domain for which the cookie is valid. If a cookie has already passed "domain" matching, then the path name of the URL for a requested document is compared with the "path" attribute. If there is a match, the cookie is considered valid and is sent along with the http request." Exh. I, at col. 8, lines 52-57."	The parent claim has not been shown to be anticipated. No demonstration of "validating" as claimed. Checking path or domain names of a cookie in order to determine whether to return the cookie is not "validation" as claimed. The citation does not demonstrate validation "at the server system." The citation does not identify a "controlled document" or "returning a controlled document if the appended session identifier is valid." The reference does not disclose a session identifier as construed by the Court.

60. The method of claim 1, wherein at least one service request comprises a purchase request, the purchase request including an associated user identifier, the method further comprising: accessing, upon receipt of the purchase request at the server system, user information associated with the user identifier sufficient to charge to an account associated with the user, the purchase price of the product identified by the purchase request; charging the user for the product identified by the purchase request according to the user information; and fulfilling the purchase request based on the user information.	Anticipated by Montulli U.S. Patent No. 5,774,670 filed October 6, 1995 or WWW-Talk MontuIli 4/19/95. "To illustrate one possible use of the state information system of the present invention, an implementation of an on-line shopping system will be described. The on-line shopping system allows customers to shop in one or more stores that are implemented as Web servers on the Internet. A customer can browse information on the Web servers that describe products available from the stores. When a desired product is found, the user can place the product into a 'virtual shopping basket.' The virtual shopping basket is implemented as a set of cookies that are sent to the client computer system and stored on the client computer system. At check-out time, the customer pays for the selected products using some type of payment system such as a credit card. After payment is received, the on-line shopping system notifies the stores to ship the selected products to the customer." Montulli '670, Col. 11, ll. 47-63.	The parent claim has not been shown to be anticipated. Neither the Contentions nor the summary judgment motion identify any disclosure of a "purchase price of the product identified by the purchase request." Neither the Contentions nor the summary judgment motion identify any "purchase request including an associated user identifier."
	Summary judgment motion adds: "Montulli explicitly discusses servers accessing stored customer information, such as billing information. Id. at col. 3, lines 5-14."	

62. The method of claim 1, further comprising: under control of a client system, displaying information identifying a product; and in response to a user selection of a hyperlink associated with a product desired to be purchased, sending a request to purchase the item along with an identifier of a purchaser of the item to a server system; and under control of the server system, upon receiving the request, retrieving additional information previously stored for the purchaser identified by the identifier in the received request; charging the user the purchase price of the product; and fulfilling the request for the product.	Anticipated by Montulli U.S. Patent No. 5,774,670 filed October 6, 1995 or WWW-Talk Montulli 4/19/95. "The customer uses Web browser software to access an on-line 'merchant' server that is operated by a merchant having products to sell. . . . The home Web page contains information about the merchant and its products (e.g., shoes, hats, shirts, etc.). The home Web page can implement a set of linked Web pages that describe the products that are available from the merchant. Each product may be associated with its own HTML document that fully describes the product. Products can be described using text, images, sounds, video clips, and any other communication form supported by Web browsers. The user can continue browsing through Web pages of the merchant server by repeating steps 212, 214, and 215. Montulli '670, Col. 12. ll. 10-27.	The parent claim has not been shown to be invalid. Neither the Contentions nor the summary judgment motion identify in the reference any "user selection of a hyperlink associated with a product desired to be purchased." Neither the Contentions nor the summary judgment motion identify any "request to purchase the item along with an identifier of a purchaser." Neither the Contentions nor the summary judgment motion identify any "additional information previously stored for the purchaser."

	"When the customer desires to buy the products, the customer accesses a link that identifies a 'check-out' Web page. The check-out Web page causes the browser to send all the product description cookies (230). Thus, the check-out Web page empties out the virtual shopping basket. The merchant server generates a total bill for all the products in the virtual shopping basket. The server may then request billing information (e.g., credit card number) and shipping (e.g., address) information from the customer using a form. In a preferred embodiment the transaction of credit card information is transmitted using a secure medium. The transaction server then performs a real-time credit card authorization. Once the transaction is authorized, transaction server sends messages to individual merchants to fulfill the order (step 240)." Montulli '670 Col. 13, ll. 9-23. Summary judgment motion adds: "Montulli explicitly discusses servers accessing stored customer information, such as billing information. Id. at col. 3, lines 5-14."	

63. The method of claim 1, wherein the session identifier is appended by the client.	Anticipated by Montulli U.S. Patent No. 5,774,670 filed October 6, 1995 or WWW-Talk Montulli 4/19/95. "When a client system that implements the present invention wishes to send an http request to a particular Web server, the client system first examines its cookie list to see if the cookie list contains any matching cookies that need to be sent to the particular Web server. Specifically, before the client sends an http request to a Web server, the client compares the URL of the requested Web document against all of the stored cookies. If any of the cookies in the cookie list matches the requested URL then information containing the name/value pairs of the matching cookies will be sent along with the HTTP request." Montulli '670 Col. 9, ll. 47-58.	The parent claim has not been shown to be invalid. No session identifier is disclosed in the reference.
65. The method of claim 1, wherein a service request comprises a request to purchase a product.	Anticipated by Montulli U.S. Patent No. 5,774,670 filed October 6, 1995 or WWW-Talk Montulli 4/19/95. "In either case, the flowchart continues in FIG. 6 where the payment computer checks the authorization of the payment order at 28. If the payment system authorizes the request, an authorization message at 29 is returned to the buyer computer, and the merchant computer checks at 30 that the authorization message came from the payment computer using the authenticator mechanism described below. Assuming that the authorization message is valid, the merchant computer performs fulfillment at 30, returning the purchased product in response at 31."	The parent claim has not been shown to be invalid.

	(Gifford '424, col. 6, ll. 50-63.)	
	Summary judgment motion substitutes: “After browsing through the Web pages provided by the server, the customer may select a product (step 216) by, for example, "clicking" (in the conventional manner) on an image of a product that causes the browser to request a Web page that fully describes the product. If the customer wishes to buy shoes from the merchant, the customer could click on a "buy it" button. The merchant server then sends an HTML form document that requests the customer to send necessary details for the purchase (step 218). For example, the customer may select a quantity, a desired style, and size of the product as requested by the form document.” Exh. I, at col. 12, lines 28-38	

66. The method of claim 65, wherein the product is transmitted over the network.	Obvious in view of Montulli U.S. Patent No. 5,774,670 filed October 6, 1995 or WWW-Talk Montulli 4/19/95 and Gifford U.S. Patent No. 5.724,424 filed December 16, 1993. "In either case, the flowchart continues in FIG. 6 where the payment computer checks the authorization of the payment order at 28. If the payment system authorizes the request, an authorization message at 29 is returned to the buyer computer, and the merchant computer checks at 30 that the authorization message came from the payment computer using the authenticator mechanism described below. Assuming that the authorization message is valid, the merchant computer performs fulfillment at 30, returning the purchased product in response at 31." (Gifford '424, col. 6, ll. 50-63.)	The parent claim has not been shown to be invalid. See discussion of claims 1 and 65. No reason is given to combine these particular references.
	Summary judgment motion substitutes: "See above Montulli disclosure re claim 65. Montulli discloses the use of cookies as a way of authenticating a user to access publications based on a paid subscription. Exh. I, at col. 2, line 67 – col. 3, line 27. “A complete system for the purchasing of goods or information over a computer network is presented.” Exh. I, at Abstract.	It is correct that Montulli discloses the use of cookies as a way of authenticating a user. That is not a session identifier, but at most a user identifier.

	Gifford Patent Disclosure: "In either case, the flowchart continues in FIG. 6 where the payment computer checks the authorization of the payment order at 28. If the payment system authorizes the request, an authorization message at 29 is returned to the buyer computer, and the merchant computer checks at 30 that the authorization message came from the payment computer using the authenticator mechanism described below. Assuming that the authorization message is valid, the merchant computer performs fulfillment at 30, returning the purchased product in response at 31." Exh. J, col. 6, lines 50-63. (emphasis added). See also Exh. J, at Fig. 5 and col. 4, lines 8-9 (showing a publication having been purchased and transmitted by the server to the client browser).	
68. The method of claim 65, wherein the product is a durable product.	Anticipated by Montulli U.S. Patent No. 5,774,670 filed October 6, 1995 or WWW-Talk Montulli 4/19/95. "The home Web page contains information about the merchant and its products (e.g., shoes, hats, shirts, etc.)." Montulli '670, Col. 12, ll. 16-20.	The parent claim has not been shown to be invalid.
78. A method of processing, in a server system, service requests from a client to the server system through a network, said method comprising the steps of:	[THE SUMMARY JUDGMENT MOTION ADDRESSES CLAIM 78 FOR THE FIRST TIME] "A method and apparatus for transferring state information between a server computer system and a client computer system." Montulli '670, Abstract.	The claim is not anticipated. Transferring state information as disclosed in the reference does not constitute a session identifier.

receiving, from the client, a service request to which a session identifier stored at the client has been appended by the client, wherein communications between the client and server system are according to hypertext transfer protocol;	"When a client system that implements the present invention wishes to send an http request to a particular Web server, the client system first examines its cookie list to see if the cookie list contains any matching cookies that need to be sent to the particular Web server. Specifically, before the client sends an http request to a Web server, the client compares the URL of the requested Web document against all of the stored cookies. If any of the cookies in the cookie list matches the requested URL then information containing the name/value pairs of the matching cookies will be sent along with the HTTP request." Montulli '670, Col. 9, ll. 47-58.	
	"[I]nformation containing the name/value pairs of the matching cookies will be sent along with the HTTP request." Montulli '670 Col. 9, ll. 47-58. HTTP stands for "hypertext transfer protocol." Montulli '670, Col. 1, ll. 53-55.	
validating the session identifier appended to the service request; and	"The "path" attribute is used to specify a subset of file system directories in a domain for which the cookie is valid. If a cookie has already passed "domain" matching, then the path name of the URL for a requested document is compared with the "path" attribute. If there is a match, the cookie is considered valid and is sent along with the http request." Montulli '670, Col. 8, ll. 52-57.	The references do not disclose a session identifier. No cookie of the reference serves as a session identifier. Therefore, validating a cookie does not disclose validating a session identifier. The references do not disclose "validating" as claimed. Checking path or domain names of a cookie in order to determine whether to return the cookie is not "validation" as claimed.
servicing the service request if the appended session identifier is valid.		The references do not disclose that servicing a service request depends on whether a session identifier is valid.

79. The method of claim 78, further comprising, in the server system: receiving an initial service request from the client; creating, responsive to the initial service request, the session identifier; and returning the session identifier to the client for storage by the client for use in subsequent distinct requests to the server system.	"[W]hen a server responds to an http request by returning an HTTP object to a client, the server may also send a piece of state information that the client system will store . . . . [W]hen the client system sends future HTTP requests to servers that fall within the range of defined URLs, the requests will include a transmittal of the current value of the state object." Montulli '670 Col. 7, lines 13-23. State information may be set by the server, and can be included for later use in subsequent requests from the client. Montulli '670, Col. 7, l. 56 – col. 8, l. 14. In	The parent claim has not been shown to be invalid. The reference does not disclose a session identifier. There is no disclosure of creating any identifier in response to an "initial" service request. Fig. 5 discloses sending a cookie much later in the process.

I declare under penalty of perjury that the foregoing is true and correct.

Signed on September 10, 2009 in Pittsburgh, PA

Michael I. Shamos